

Appl. No. : 10/817,200
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AMENDMENTS TO THE CLAIMS

Please amend Claims 48, 51-55, 59, and 64.

In addition, please cancel Claims 1-47, 60-63, and 65.

Please also add new Claims 66-73.

1.- 47. (Canceled)

48. (Currently amended) A process chamber flow control system comprising:

a process chamber;

a first inlet leading directly into the process chamber;

an outlet defining a flow path between the first inlet and the outlet;

an ~~a~~ second inlet leading directly into the process chamber, the second inlet being positioned to open into the flow path between the first inlet and the outlet;

a channeling duct configured to channel a plasma generator product to the second inlet; and

an inlet insert located in the second inlet, the inlet insert being configured to disrupt a reactive flow flowing through the second inlet into the process chamber.

49. (Original) The system of Claim 48, further including a remote plasma generator configured to produce the plasma generator product.

50. (Original) The system of Claim 48, wherein the inlet insert is configured to disrupt the plasma generator product in order to control a flow geometry of the plasma generator product flowing into the process chamber.

51. (Currently amended) The system of Claim 50, wherein the inlet insert comprises a plate having at least one shaped opening selectively located therein in order to disrupt the plasma generator product flowing through the at least one shaped opening and issuing from the second inlet.

52. (Currently amended) The system of Claim 50, wherein the inlet insert comprises a plate having at least one flow blocking portion selectively located therein in order to disrupt the plasma generator product flowing around the at least one flow blocking portions and issuing from the second inlet.

53. (Currently amended) The system of Claim 48, wherein the inlet insert is configured to produce a uniform reactive flow geometry from the second inlet.

54. (Currently amended) The system of Claim 48, wherein the inlet insert is configured to produce a non-uniform reactive flow geometry from the second inlet.

55. (Currently amended) The system of Claim 48, wherein the second inlet further comprises:

a throat defining the portion of the second inlet where the reactive flow enters the second inlet; and

a mouth defining the portion of the second inlet through which the reactive flow exits the second inlet into the process chamber, the mouth having a greater circumference than the throat.

56. (Original) The system of Claim 55, wherein the inlet insert is located between the mouth and the throat.

57. (Original) The system of Claim 55, wherein the inlet insert is located in the mouth.

58. (Original) The system of Claim 57, wherein the mouth is configured to hold the inlet insert in a selectively removable position.

59. (Currently amended) The system of Claim 55, wherein the second inlet has a conical profile with side walls flaring outwardly from the throat to the mouth, the flared side walls having ~~asupport~~ a support configured to hold the inlet insert in a selectively removable position.

60. (Canceled)

61. (Canceled)

62. (Canceled)

63. (Canceled)

64. (Currently amended) An apparatus for use in a process chamber flow control system having a process chamber, an inlet leading to the process chamber, and a channeling duct configured to channel a reactive flow to the inlet, comprising:

an inlet plate configured to disrupt a reactive flow flowing through the inlet into the process chamber, the inlet plate comprising a plate of a substantially oval shape, the plate comprising a flow blocking section and an opening,

wherein the flow blocking section and the opening are together configured to alter a path of the reactive flow such that the reactive flow widens as it issues from the inlet relative to a flow pattern from the inlet in the absence of an inlet plate.

65. (Canceled)

66. (New) The apparatus of Claim 64, wherein the flow blocking section and the opening are together configured to produce a substantially uniform reactive flow geometry.

67. (New) The apparatus of Claim 64, wherein the flow blocking section and the opening are together configured to produce a non-uniform reactive flow geometry.

68. (New) The apparatus of Claim 64, wherein the opening has a substantially circular shape, and wherein the opening is positioned substantially in the middle of the inlet plate.

69. (New) The apparatus of Claim 64, wherein the inlet plate has an elongate axis, wherein the opening is positioned generally on one side of the elongate axis, and wherein the flow blocking section is positioned generally on the other side of the elongate axis.

70. (New) The apparatus of Claim 69, wherein the flow blocking section comprises a shallow recess generally in the center of the elongate axis.

71. (New) The apparatus of Claim 64, wherein the inlet plate has an elongate axis, and wherein the opening has an elongate shape extending along the elongate axis.

72. (New) The apparatus of Claim 71, wherein the flow blocking section comprises protrusions which extend toward the elongate axis.

73. (New) The apparatus of Claim 71, wherein the opening is wider in dimension perpendicular to the elongate axis on its ends than on its middle.